



**USAID BEO DECISION MEMO FOR FY17 PREP  
ENVIRONMENTAL STATUS REPORT (ESR)**

**Awardee:** Adventist Development and Relief Agency (ADRA)  
**DCHA Office:** Food for Peace  
**Program Title:** ASTOY  
**Award Number:** AID-FFP-A-14-00009  
**Country/Region:** Madagascar  
**Life of Grant:** September 29, 2014 - September 27, 2019  
**LOP Funding:** \$37,000,000  
**Link to Original IEE:** [http://gemini.info.usaid.gov/egat/envcomp/document.php?doc\\_id=44256](http://gemini.info.usaid.gov/egat/envcomp/document.php?doc_id=44256)

ENVIRONMENTAL ACTION RECOMMENDED:	
Categorical Exclusion: X	Negative Determination w/ Conditions: X
Positive Determination:	Deferral:
Bureau Environmental Threshold Decision (ETD): Approval w/ Conditions	

**USAID Bureau Environmental Officer Approval:**

This USAID BEO Decision Memo (Memo) is to inform Adventist Development and Relief Agency (ADRA) that the PREP FY17 ESR has been approved with project-specific conditions by the DCHA Bureau Environmental Officer (BEO), on March 29, 2017.

The DCHA BEO would like to provide illustrative questions (Attachment 1) related to the upcoming FFP Madagascar Joint Mid Term Review (JMTR) hosted by the FFP M&E Team lead by Mr. Arif Rashid (April/May 2017). For the review, ADRA must be prepared to discuss their concerns, lessons learned, and successes with respect to environmental processes, staffing budgeting, meeting of performance objectives, etc. FFP will be applying Lessons Learned from the recent USAID environmental expert's<sup>1</sup> participation on the JMTR conducted in Malawi (March 2017).

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<sup>1</sup> Dr. Charlotte Germain-Aubrey, USAID Environmental Advisor to the DCHA BEO

The DCHA BEO recently approved the FFP Madagascar [PERSUAP](#). USAID appreciates the FFP PVO leadership in developing the first-ever agricultural PERSAUP for USAID Madagascar. This work is an important contribution to the professionalization of food security interests in the country.

ADRA has undergone all necessary Mission and Washington clearances and meets the minimum requirements, with the following eight (8) project-specific conditions:

**Condition 1:** ADRA must ensure due diligence with environmental staffing provide an update to the AOR and DCHA BEO after the JMTR. ADRA must be prepared to discuss such environmental staffing with the Joint Mid Term Review (JMTR).

**Condition 2:** Given the complexities of pest management, the AOR must ensure that ADRA staff provide necessary technical and capacity concerning safe and effective management of pest infestation with pesticides.

**Condition 3:** ADRA must submit an update on the GGS to the DCHA BEO within the next 60 days. In addition to submitting this update to the BEO, an update on the GGS should be submitted to the Joint Mid Term Review (JMTR) team as well.

**Condition 4:** ADRA must submit ESFs for each type of activity that is currently using an ESF (such as, reforestation, road, irrigation system, etc.) to the DCHA BEO within the next 60 days. At that time, ADRA must also provide justification for not doing an EA for the activities that currently list ESFs for the activities. In addition to submitting these to the BEO, the ESFs need to be submitted to the Joint Mid Term Review (JMTR) team as well.

**Condition 5:** ADRA must submit completed\* copies of any completed Fumigation Management Plans with future Environmental Status Reports. ADRA must provide copies of any completed Fumigation Management Plans to the Joint Mid Term Review (JMTR).

**Condition 6:** ADRA must appropriately dispose of and manage all healthcare waste resulting from veterinary services offered and included include these measure into the EMMP for the next ESR.

**Condition 7:** Greater emphasis on the monitoring of fuelwood in efficient stove promotion and learning sessions must be included for the duration of the project.

**Condition 8:** A new and improved ESR format for annual environmental reporting is described in the FY16 FFP RFA IEE and should be used by ADRA for future ESR submissions.

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**Issue 1: Ensuring Environmental Staffing and Budgeting.**

**Discussion:** The BEO wants to emphasize the importance of staffing for environmental reporting and implementation. Budgeting for the appropriate staffing for the overall environmental integration, especially for work related to pesticides, is vital in order to ensure USAID oversight and due diligence. For direction and guidance in developing a budget for environmental compliance and management activities within a development program, USAID has developed an [Environmental Compliance Budgeting Toolkit](#). This toolkit has sections to assist both budget developers and selection committee members who review proposal budgets.

**Condition 1:** ADRA must ensure due diligence with environmental staffing provide an update to the AOR and DCHA BEO after the JMTR. ADRA must be prepared to discuss such environmental staffing with the Joint Mid Term Review (JMTR).

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**Issue 2: Challenges concerning PERSUAP implementation.**

**Discussion:** ADRA was out of environmental compliance with respect to the pesticide activities before the [PERSUAP](#) was approved. The ESR mentions that “Training on pesticide handling guidelines as per submitted PERSUAP was implemented with technical staff in FY2016.” These training took place before the PERSUAP was approved. Now that the PERSUAP is approved, trainings, promoting, and use of pesticide can go forward in accordance with the PERSUAP. However, the DCHA BEO wants to note that pesticide related activities should not have been taking place without the approval of the PERSUAP.

With the recently approved [PERSUAP](#) trainings, promoting, and use of pesticide can go forward in accordance with the PERSUAP. Work with your AOR to ensure that the project has the minimal and sufficient budget for the PERSUAP implementation and provide all necessary resources and staffing. However, the DCHA BEO wants to note that pesticide related activities should not have been taking place without the approval of the PERSUAP.

However, now that the PERSUAP is approved, the BEO wants to emphasize the importance of proper PERSUAP reporting and implementation. Budgeting for the appropriate staffing for the overall environmental integration, especially for work related to pesticides, is vital in order to ensure due diligence with respect to implementation.

**Condition 2: Given the complexities of pest management, the AOR must ensure that ADRA staff provide necessary technical and capacity concerning safe and effective management of pest infestation with pesticides.**

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**Issue 3: Environmental monitoring systems and Go Green Strategy**

**Discussion:** In the previous ESR, ADRA mentioned that, “His (the Project Environmental Officer’s) third task is the adaptation and implementation of the Go Green Strategy through the technical and field staff of the three project components... the lessons learned in the implementation of Go Green and other environmental measures will be captured and documented through the regular reporting system, including the ESR presented annually.” However, no update was provided and there was no mention about the Go Green Strategy (GGS) in this ESR. The BEO is interested in ADRA’s implementation of the GGS and requires that ADRA provide an update.

**Condition 3: ADRA must submit an update on the GGS to the DCHA BEO within the next 60 days. In addition to submitting this update to the BEO, an update on the GGS should be submitted to the Joint Mid Term Review (JMTR) team as well.**

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**Issue 4: Environmental Screening Forms (ESF) for activities on the EMMP tables.**

**Discussion:** The DCHA BEO notes that in the EMMP table for this ESR, ADRA reference ESFs for the following activities. Since the ESFs were not submitted with the ESRs, the DCHA BEO cannot perform a technical review of the following activities since, although the ESFs are mentioned in the Monitoring Indicator Status/Comments columns, the ESFs are not submitted.

**Activity: 43 multi-use irrigation system constructed or rehabilitated including improved pond in the South West region**

Details: Two ESF for multi-use water points approved for the region where these are implemented and 1 ESF approved for irrigation and 2 under preparation for submission in the

last quarter of FY2016. 3 ESFs approved for reforestation in Amoron'i Mania, Haute Matsiatra and Antsimo Andrefana.

**Activity: 64 safe water points constructed and rehabilitated**

Details: ESF to be developed in the last quarter of FY2106. Initial technical and environmental assessment will be conducted in FY2016. Training to water Management committees includes training on environmental aspects.

Environmental Assessment (EA): Since ADRA is doing multiple ESFs, the BEO is considering that EAs might be needed. Please provide information about scale and density of a watershed. Road rehabilitation and irrigation projects often trigger EAs in other FFP projects. The BEO is going to assume that EAs are needed for activities that have developed ESFs, until ADRA provides justification to the contrary.

**Condition 4: ADRA must submit ESFs for each type of activity that is currently using an ESF (such as, reforestation, road, irrigation system, etc.) to the DCHA BEO within the next 60 days. At that time, ADRA must also provide justification for not doing an EA for the activities that currently list ESFs for the activities. In addition to submitting these to the BEO, the ESFs need to be submitted to the Joint Mid Term Review (JMTR) team as well.**

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**Issue 5: Fumigation Management Plans (FMPs).**

**Discussion:** In the recently approved [PERSUAP](#), the DCHA BEO approved fumigation activities for ASTOY. The DCHA BEO requests copies of any completed FMPs be submitted with the future ESRs in order to ensure due diligence. FMPs were submitted with the PERSUAP but the BEO is interested in reviewing the completed FMPs.

Fumigation PEA Update: It should also be noted that the [Fumigation Programmatic Environmental Assessment](#) is undergoing a 2016 update. ADRA should stay up-to-date with any changes.

**Condition 5: ADRA must submit completed\* copies of any completed Fumigation Management Plans with future Environmental Status Reports. ADRA must provide copies of any completed Fumigation Management Plans to the Joint Mid Term Review (JMTR).**

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**Issue 6: The EMMP did not incorporate mitigation measures as to how the veterinary healthcare waste will be disposed of properly.**

**Discussion:** In the [IEE](#) approval, the DCHA BEO included a condition requiring that “ADRA must appropriately dispose of and manage all healthcare waste resulting from veterinary services offered.” In the [PREP FY16 ESR](#), ADRA responded that they understood the danger of healthcare waste and that “As the curriculum for livestock activities is currently being developed, the inclusion of these measures can happen in the first months of FY2016, for immediate implementation.” However, no mitigation measures regarding healthcare waste were added to the EMMP table. And no mention of what types of implementation measures are being taken.

**Condition 6: ADRA must appropriately dispose of and manage all healthcare waste resulting from veterinary services offered and included include these measure into the EMMP for the next ESR.**

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**Issue 7: Monitoring of fuelwood for cookstove activities.**

**Discussion:** In response to the programming ADRA noted on cooking and fuelwood efficiencies, the BEO would like to offer some guidance concerning cookstoves. The BEO would first like to commend ADRA for using a reforestation program that will offset any use of burning wood for cooking lessons and identifies and purchasing fuel efficient stoves for the cooking lessons. (p. 4)

Given the difficulty achieving proper use by target populations and challenges for effective and well adapted fuel efficient stove designs, proper monitoring of fuelwood and cookstove activities is important. Monitoring indicators, including proper usage, fuel efficiency, and reduction in per capita fuelwood consumption are import markers in order to evaluate whether the cookstove techniques are attaining their intended results. While ADRA is not distributing stoves directly, they are educating people on efficient stoves. Promoting proper monitoring of fuelwood is essential in effective stove promotion.

More information regarding monitoring fuel efficient cooking practices can be found on USAID’s “Fuel Efficient Stove Programs in Humanitarian Settings - An Implementer’s Toolkit”- [http://www.energytoolbox.org/cookstoves/FES\\_Programs\\_in\\_Humanitarian\\_Settings.pdf](http://www.energytoolbox.org/cookstoves/FES_Programs_in_Humanitarian_Settings.pdf).

**Condition 7: Greater emphasis on the monitoring of fuelwood in efficient stove promotion and learning sessions must be included for the duration of the project.**

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**Issue 8: ESR format is old.**

**Discussion:** The ESR template used by ADRA is old and the DCHA BEO has released a better version. It is recommended that ADRA refer to the new and improved annual environmental reporting format as described in the [FY16 RFA IEE](#). The Annex 3 in the new RFA IEE provides the latest ESR template for future reference.

**Condition 8: A new and improved ESR format for annual environmental reporting is described in the FY16 FFP RFA IEE and should be considered for use by ADRA for future ESR submissions.**

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## **Attachment 1: Illustrative Questions for FFP Madagascar Joint Mid Term Review (JMTR)**

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**DCHA BEO Condition 1:** ADRA must ensure due diligence with environmental staffing provide an update to the AOR and DCHA BEO after the JMTR. ADRA must be prepared to discuss such environmental staffing with the Joint Mid Term Review (JMTR).

***Question 1 for JMTR to ask ADRA:** The BEO had identified a range of compliance gaps based upon your most recent annual Environmental Status Report. Do you have at least one full-time and technically knowledgeable project staff to oversee environmental management systems for the life of project? If not, provide justification. (Please note that it is usually not sufficient to allocate this responsibility to a single (i.e., NRM staff), this responsibility must be cross cutting.)*

**DCHA BEO Condition 2:** Given the complexities of pest management, the AOR must ensure that ADRA staff provide necessary technical and capacity concerning safe and effective management of pest infestation with pesticides.

***Question 2 for JMTR to ask ADRA:** Provide us with an update on the implementation plan for your recently developed PERSUAP for pesticide use. What type of tools and trainings are you providing to beneficiaries?*

**DCHA BEO Condition 3:** ADRA must submit an update on the Go Green Strategy (GGS) to the DCHA BEO within the next 60 days. In addition to submitting this update to the BEO, an update on the GGS should be submitted to the Joint Mid Term Review (JMTR) team as well.

***Question 3 for JMTR to ask ADRA:** Provide us with an update on environmental monitoring system for “Go Green Strategy (GGS)”<sup>2</sup> as described in your IEE. What type of activities related to this implementation are being conducted? Is there an alternate monitoring system in place?*

**DCHA BEO Condition 4:** ADRA must submit an Environmental Screening Form (ESF) for each type of activity that is currently using an ESF (such as, reforestation, road, irrigation system, etc.) to the DCHA BEO within the next 60 days. At that time, ADRA must also provide justification for not doing an EA for the activities that currently list ESFs for the activities. In addition to submitting these to the BEO, the ESFs need to be submitted to the Joint Mid Term Review (JMTR) team as well.

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<sup>2</sup> This GGS was developed and successfully implemented by FFP Madagascar CRS SALOHI (FY09-14).



***Question 4 for JMTR to ask ADRA:*** Provide us with an update on the Mission-required Environmental Screening Forms (ESF) for infrastructure (like irrigation systems, reforestation, roads) activities. Given the potential for higher negative environmental impact in infrastructure activities, please provide us with all approved ESFs.

***Follow-up to Question 4:*** In other FFP projects, these type of activities require higher levels of environmental assessment, i.e., a “Positive Determination” (per regulation). Why do these activities not justify an Environmental Assessment (EA)? What is the scale of the activities using ESFs?

**DCHA BEO Condition 5:** ADRA must submit completed copies of any completed Fumigation Management Plans with future Environmental Status Reports. ADRA must provide copies of any completed Fumigation Management Plans to the Joint Mid Term Review (JMTR).

***Question for 5 JMTR to ask ADRA:*** Provide us with an update on fumigation activities. Have fumigation activities begun? Have you hired fumigation service providers for warehouses? If so, provide us with an illustrative subset of the completed Fumigation Management Plans. If not, then provide a justification.

## Title II Environmental Status Report

**Title of Program:** ASOTRY

**Awardee:** ADRA International

**Host Country or Region:** Madagascar

**Award Number:** AID-FFP-A-14-00009

**Life of Activity:** September 29<sup>th</sup>, 2014 to September 28<sup>th</sup>, 2019

**Fiscal Year of Submission:** PREP 2017 and reporting on FY2016 activities.

*Note: the following information is for the fiscal year of submission.*

<b>Funding Begin:</b> September 29 <sup>th</sup> , 2014	<b>LOA Amount:</b> \$37,000,000
<b>Funding End:</b> September 28 <sup>th</sup> , 2019	<b>Sub-Activity Amount:</b> \$

<b>Resource Levels:</b>	<b>Food Aid Commodity:</b> 8,530 MT	
<b>Monetization Request:</b> \$ 0	<b>202(e):</b> \$ 20,422,000	<b>ITSH:</b> \$ 8,840,000

<b>ESR Prepared by:</b> RAVONJIARIVELO, Rado Environment Specialist	<b>Date:</b> (03/18/2016)
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<b>Date of Previous ESR:</b> n/a	<b>Date of Most Recent IEE:</b> 07/31/2015
<b>Contact*:</b> Emanuel da Costa, Senior Program Manager 12501 Old Columbia Pike Silver Spring, MD 20904 1.301.680.6380 <a href="mailto:Emanuel.daCosta@adra.org">Emanuel.daCosta@adra.org</a>	

*\* Awardees should include contact information (name, phone numbers and email addresses) for staff responsible for the record keeping of the food aid program. Responsible awardee staff should have the ability to access all of the food aid program's files in the field, at headquarters, in storage or elsewhere, as required.*

## Title II Environmental Status Report

### A. Status of the Initial Environmental Examination

☒ **No revisions or modifications** of the Initial Environmental Examination (IEE) are needed.

☐ An amended IEE is submitted.

### **B. Status of Fulfilling Conditions in the Initial Environmental Examination, including Mitigation and Monitoring**

■ All mitigation measures were successful at preventing environmental impact as specified in the original IEE. An Environmental Status Report (ESR) describing compliance measures taken is attached.

☐ **Improved mitigation measures** were adopted to better reduce environmental impacts. An ESR describing these improved compliance measures taken is attached.

**A. Food for Peace Approval of the Environmental Status Report**

*Food for Peace Mission or Regional Office, as appropriate\*:*

## Food for Peace Officer

Campbell Date: 1/31/17

Environmental Officer

Date: 01/23/2017

*Food for Peace, Washington*

DCHA

Bureau

Environmental

Officer

Date: \_\_\_\_\_

Erika J. Clesceri

3/29/2017

*\* FFP/M/R environmental officer clearance is mandatory; clearance by the FFP/M/R FFP officer is optional.*

## Environmental Status Report Instructions and Format

Most of the activities of the project ASOTRY were confirmed for Categorical Exclusion in the approved IEE. The current report will provide an update on the status of the mitigation measures taken for all the indicators receiving a Negative Determination with Conditions. No activity had a Positive Determination and none was deferred.

### A. Status of the Initial Environmental Examination

Initial Environmental Examination status haven't changed during FY16

i. Modified or New Activities

None of ASOTRY's activities have been modified, changed or added during FY16

ii. Resolution of Deferrals

Approved Initial Environmental Examination presents no deferral

iii. Updates to the Initial Environmental Examination

Based on the above, is an updated IEE needed?

☐ Yes (If yes, attach here.)      No ☒

If the previous documentation was a categorical exclusion submission, is an updated categorical exclusion needed to deal with new categorical exclusions for new activities?

☐ Yes (If yes, attach here.)      No ☐ Not Applicable ☒

### B. Status of Fulfilling Initial Environmental Examination Conditions

i. Below the mitigation measures and monitoring of the IEE conditions.

Activities	Mitigation Measures	Monitoring indicator Status	Comments
<b>Purpose 1: Improved health and nutrition status of women of age-reproductive and children under five</b>			
<i>Sub-purpose 1.1: Improved health nutrition behaviors of women and children 0-59 months</i>			
<b>Outcomes: 1.1.2 Increased consumption of nutrient dense and diverse foods for women and children.</b>			
- 25,920 beneficiaries participating in Community Complementary Feeding and Learning sessions (CCFLS)	<p>Conduct an analysis of needed wood consumption for CCFLS session</p> <p>Transfer analysis results to hectares of reforestation</p> <p>Local species will be chosen for reforestation</p> <p>Research on efficient stove</p> <p>Identify the land by DPMP process (Disaster Preparedness Management Plan) and according to the Mayor land owner to have commitment with the community for the use and the right vis-à-vis reforestation product use</p>	<p>Not monitored as the activity is now planned to start in FY2017. It is being re-designed during the last quarter of FY2016.</p> <p>Not monitored as the activity is now planned to start in FY2017. It is being re-designed during the last quarter of FY2016.</p> <p>Not monitored as the activity is now planned to start in FY2017. It is being re-designed during the last quarter of FY2016.</p> <p>Efficient stove is available and promoted one will be chosen</p> <p>Not monitored as the activity is now planned to start in FY2017. It is being re-designed during the last quarter of FY2016.</p>	<p>CCFLS is being re-designed for it to start in FY2017. As a result, there was no need to monitor wood consumption and deforestation yet. On the other hand, the DPMP were developed and reforestation was included using local species.</p> <p>Reforestation started in FY2016 as a complement to agriculture and infrastructure activities.</p> <p>Reforestation will offset any use of burning wood for cooking lessons. In addition, fuel efficient stoves were identified and are being purchased to be used in cooking lessons.</p>
<b>Outcome 1.3.2: Improved access to sustainable sanitation facilities</b>			

- Construct latrines	<p>Use DPMP to identify proper latrine location</p> <p>Train community on construction of environmentally friendly latrines such as dry systems</p> <p>Drain well waste water resources from sanitation facilities</p> <p>Train community on efficient techniques for decommissioning latrine spot such as reliable system for safety emptying latrines and transportation of feces: use of gloves, safe tanks...</p> <p>O&amp;M is attached for more specific mitigation</p>	<p>DPMP is available but no location haven't been identified</p> <p>Not monitored as the activity is now planned to start in FY2017.</p> <p>Not monitored as the activity is now planned to start in FY2017.</p> <p>Not monitored as the activity is now planned to start in FY2017.</p> <p>No operation or maintenance have been done</p>	<p>The approved mitigation measures have been included in the design of the latrines and of the implementation of Community Led Total Sanitation (CLTS). Although CLTS activities have started in FY2016, the construction of latrines is only to start in FY2017.</p>
Activities	Mitigation Measures	Monitoring indicator Status	Comments
<b>Purpose 2: Increased sustainable access to food for vulnerable households</b>			
<b>2.1: Increased Agriculture Production</b>			
<b>2.1.1: Increased Access to Services and Inputs</b>			
<b>Output 2.1.1.1: 12200 farmers have access to Agricultural service and input providers opportunities</b>			
- 5,580 hectares of land under improved technologies or improvement practices.	<p>Inform community on possible land tenure due to over production</p> <p>Promote mechanical techniques regarding soil protection</p> <p>Promote use of environmental sound technique even for improved agricultural techniques</p> <p>Promote intercropping and crop rotation</p>	<p>Farming training includes land tenure aspects to avoid any conflict.</p> <p>Mechanical techniques such as minimum soil disturbance. Adapted tool is expected to be developed during Q4 of FY2016.</p> <p>Environmental measures included in training curriculum developed in FY2015</p> <p>Intercropping and crop rotation is part of agricultural component promoted technology and FFS Agriculture have been trained in those techniques</p>	<p>Through FFS, improved technologies and improvement of farmers practices are part of environmentally sound design of the agricultural component. Promotion is directly</p>



	<p>Promote compost application to improve organic matter content and soil texture and its ability to infiltrate rainfall</p> <p>Promote agroforestry practices</p> <p>Promote leguminous cover crops - used as green manures or mulches, to fix nitrogen, raise organic matter content, cover soil and protect it from raindrop impact</p> <p>Promote zero or low tillage - crop residues that are left after harvest</p>	<p>Farmers have been trained in compost application and in some field school organic matter have been used (annex 1: photo compost technique &amp; organic matter used)</p> <p>Agroforestry practices are part of component 2 promoted improved techniques and farmers have been trained. Demonstration plots were also use to complete training.</p> <p>FFS training include leguminous cover crops</p> <p>Promotion of soil protection using crop residues left after harvest and used as organic matter for the next season is part of FFS training.</p>	<p>done in farmers' field schools.</p>
<p>- Activity 1: Establish and train seed producer groups</p> <p>7 out of 15 (Q1-Q3) (for FY2016)</p>	<p>Application of IPM and Safe Use Action Plan</p>	<p>International consultant submitted PERSUAP during FY2016. IPM and SUAP is expected to be approved before the end of FY2016.</p>	<p>Approved PERSUAP is expected during FY2016 and ASOTRY IPM will follow. Farmers receive during FY2015 training including environmental measures from FY2015. Component 2 field staff were also trained on content of PERSUAP for application in FFS activities.</p>
<p>- Activity 2: Train 60 local livestock breeders (poultry, goat and sheep, fingerlings)</p>	<p>Selecting breeds that are well adapted to the environment is vital to successful livestock management—the value of appropriate breed selection should not be</p>	<p>Technical Specialists are involved in the selection of breeds and are providing information to farmers on most suitable breeds. All provision of animals to farmers and development of animal breeders are</p>	<p>Activity started in FY2016. All animals procured were from local breeds; lineages</p>

16 out of 28 (Q2) For FY2016	underestimated.	implemented locally to control presence of diseases, and select animals suited to the local environment.	and presence of diseases were controlled. The formation of breeders used the same approach, while project technicians controlled the selection of breeds.
- Activity 3: Provide grants farmers for purchase of Agricultural equipment and processing equipment	Improvement can be best achieved through minimum soil disturbance by cultivation and surface traffic, and good subsurface drainage below	Minimum soil disturbance techniques will help improvement for next period of culture	As planned, tested have been done regarding minimum soil disturbance techniques and feedbacks from this activity will allow a better adaptation of techniques in ASOTRY zones

#### Outcome 2.1.2: Improved Agricultural Production Practices

##### Output 2.1.2.1.1: 6,000 livestock producers trained on appropriate livestock practices

<p>- Activity 1 : Train livestock producers on livestock management practices</p> <p>1038 out of 2946 (Q2) For FY2016</p>	<p>Rangeland management training and practices by community committees. Ensure that the customary or legal rights and responsibilities of all parties are harmonized and accepted. Agreements should cover how each resource will be used, who will use it, when it is to be used, utilization rates and quotas, management costs, and monitoring responsibilities</p> <p>Develop decision-makers' awareness of the long-term economic importance of maintaining balanced ecosystems and resilience.</p>	<p>Socio-organization is part of FFS group training. In addition, promotion of production of fodder is promoted to reduce rangeland where not appropriate in the social context.</p> <p>Environmental measures included in training curriculum developed in FY2016.</p>	<p>During FY2016, livestock production has been promoted. Promotion includes training on SUAP. Expected approved PERSUAP will allow a better IPM and production.</p>
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	<p>Minimize GHG emissions and mitigate climate change by implementing sustainable manure management and feed crop production practices, such as composting and crop rotations</p> <p>For grazing systems, guarantee managers and pastoralists' sufficient mobility and flexibility to manage grazing areas sustainably, use water and biomass efficiently, destock rapidly in times of drought and restock when rains return.</p> <p>Proper construction of ponds; Proper site selection: § Locate ponds where they do not cause a loss of habitats such as mangroves, wetlands, lagoons, rivers,</p> <p>Choose sites with good soil, preferably clay-loam or sandy-clay, that will retain water and be suitable for building dikes.</p>	<p>Composting techniques have been promoted to minimize GHG emissions.</p> <p>Animal stock management training includes the approved mitigation measures to allow sustainable grazing areas.</p> <p>Paddy fields have been used as pond for aquaculture and the protection of sensitive habitats is considered in the design and in the selection of the location of ponds.</p>	
Activity 2: Organize 12 fodder demonstration plots and train 176 farmers on fodder and fodder seed production	Choose the adequate fodder species beneficial to livestock, wildlife, soils and cultivated crops	Technical Specialists are involved in the selection of fodder and suitable techniques to grow fodder. Selection of fodder varies according to the environment found in each region.	

**Output 2.1.2.1.2. 32,000 farmers trained on appropriate farming technologies**

Activity 1: establish 800 demonstration plots and train 32000 farmers on crop farming technologies	<p>Inform community on possible land tenure due to over production</p> <p>Promote mechanical techniques regarding soil protection</p> <p>Promote use of environmental sound</p>	<p>Farming training includes land tenure aspects to avoid any conflict.</p> <p>Mechanical techniques such as minimum soil disturbance. Adapted tool is expected to be developed during Q4 of FY2016.</p> <p>Environmental measures included in training curriculum developed in FY2015.</p>	In addition to the regular training included in FFS activities to promote low soil disturbance, Tillers International is introducing minimum
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	<p>techniques</p> <p>Promote intercropping and crop rotation</p> <p>Promote compost application to improve organic matter content and soil texture and its ability to infiltrate rainfall</p> <p>Promote agroforestry practices</p> <p>Promote leguminous cover crops - used as green manures or mulches, to fix nitrogen, raise organic matter content, cover soil and protect it from raindrop impact</p> <p>Promote zero or low tillage - crop residues that are left after harvest</p>	<p>Environmental measures included in training curriculum developed in FY2015.</p> <p>Intercropping and crop rotation is part of agricultural component promoted technology and FFS Agriculture groups have been trained in those techniques.</p> <p>Farmers have been trained in compost application and in some field school organic matter have been used (annex photo compost technique &amp; organic matter used)</p> <p>Agroforestry practice is part of Component 2 promoted improved techniques and farmers have been trained. Demonstration spot is expected.</p> <p>FFS training include leguminous cover crops.</p> <p>Promotion of soil protection using crop residues left after harvest and used as organic matter for the next season is part of FFS training.</p>	<p>disturbance tools during Q4 of FY2016.</p> <p>Farmers already receive training including environmental measures as part of their regular training from FY2015.</p>
<p>- Activity 1: establish 800 demonstration plots and train 32000 farmers on crop farming technologies (Livestock)</p> <p>99 out of 325 (Q2) For FY2016</p>	<p>Appropriate breeds i.e. local or regional and non-exotic species will be promoted</p> <p>Train livestock producer on livestock production</p> <p>If possible, use non-agricultural land for overgrazing and imbalanced foraging</p> <p>Consult community on efficient use of water resource and if possible coordinate with C3 specialist on best use of infrastructure implemented by them</p> <p>All mitigation techniques used by other component will be promoted to protect soils and water resource</p>	<p>Technical Specialists are involved in the selection of suitable breeds</p> <p>Livestock producer have been trained on livestock production and training include environmentally sound design techniques regarding livestock</p> <p>Measures to avoid overgrazing are included in the training of livestock owners, such as fodder production and livestock management techniques.</p> <p>Multi-Use Water system have been rehabilitated to improve water access for livestock (see below)</p> <p>Environmental measures included in training curriculum developed in FY2015</p>	<p>Farmers already receiving training including environmental measures from FY2015</p>

<p>Activity 1: establish 800 demonstration plots and train 32000 farmers on crop farming technologies</p>	<p>Promotion agro ecological technologies and improved watershed management:</p> <p>Living Barriers—e.g., contour hedgerows or grass strips planted along the contour to trap and/or filter runoff and retain soil;</p> <p>Strip Cropping or Contour Farming—plowing and tilling along the contour to trap rain and avoid runoff and erosion</p> <p>Leguminous Cover Crops—used as green manures or mulches, to fix nitrogen, raise organic matter content, cover the soil and protect it from raindrop impact</p> <p>Zero or Low Tillage—crop residues are left after harvest on the site, and the next crop is sown with minimum disturbance to soils.</p> <p>Adjustments to Agronomic Practices—include intercropping, improved plant spacing and appropriate crop rotation</p> <p>Compost Application—to improve organic matter content and texture of the soil and its ability to infiltrate rainfall</p> <p>Agroforestry Practices—a mixture of tree crops to crop and/or livestock farming system</p> <p>Improving training packages and pesticide handling guidelines</p>	<p>Farmers training include agro ecological technologies and improvement of watershed.</p> <p>Contour hedgerows and grass strip planting are part of improved technologies promoted.</p> <p>Strip Cropping or Contour Farming—plowing and tilling along the contour to trap rain and avoid runoff and erosion technologies promoted</p> <p>Leguminous Cover Crops—used as green manures or mulches, to fix nitrogen, raise organic matter content, cover the soil and protect it from raindrop impact are part of improved technologies promoted</p> <p>Zero or Low Tillage—crop residues are left after harvest on the site, and the next crop is sown with minimum disturbance to soils are part of improved technologies promoted</p> <p>Adjustments to Agronomic Practices is part of improved technology promoted</p> <p>Compost application is part of improved technology promoted</p> <p>Agroforestry is introduced in regular FFS activities and selection of local trees is used in complement to farming activities.</p> <p>Expected approved PERSUAP will allow training on pesticide handling guidelines.</p>	<p>Technical staff received environmental design and best practices from environmental specialist and agricultural team Farmers have been trained on all 13 improved technologies promoted by ASOTRY</p>
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	<p>Promote farmer and community participation through FFS approach: in designing agricultural development activities, in judging the chances for harmful environmental impacts, and in controlling and mitigating such impacts.</p> <p>Greater reliance on IPM solutions for pest problems</p> <p>Improving training packages and pesticide handling guidelines</p> <p>Improving rice paddies irrigation efficiency through water users associations management, promotion of Intensive rice system</p>	<p>Technical staff received environmental design and best practices from environmental specialist and agricultural team. Farmers have been trained on all 13 improved technologies promoted by ASOTRY</p> <p>Expected approved PERSUAP will allow training on pesticide handling guidelines</p> <p>Expected approved PERSUAP will allow training on pesticide handling guidelines</p> <p>Component 2 and 3 have consulted communities to identify irrigation system to be rehabilitated. Rehabilitation of irrigation system will start in the last quarter of FY2016.</p>	<p>Farmers already receiving training including environmental measures from FY2015</p>
<p>Activity 2: establish 13 fruit tree nurseries</p>	<p>Greater reliance on IPM solutions for pest problems</p> <p>Improving training packages and pesticide handling guidelines</p> <p>Document the needs and opportunities of the farming system and local agro-ecology, using good baseline data</p> <p>Ensure that the combination of trees and crops will yield a net benefit for both the farmers and the local ecosystem.</p> <p>Install nurseries on level land, far from drainage areas</p> <p>Select sites which are not susceptible to erosion (level)</p>	<p>Training on pesticide handling guidelines as per submitted PERSUAP was implemented with technical staff in FY2016.</p> <p>Training on pesticide handling guidelines as per submitted PERSUAP was implemented with technical staff in FY2016.</p> <p>Not monitored as activity is planned for FY2017.</p> <p>Not monitored as activity is planned for FY2017.</p> <p>Not monitored as activity is planned for FY2017.</p> <p>Not monitored as activity is planned for FY2017.</p>	<p>Fruit tree nursery activity is included in FY2017 plans with FFS groups where fruit production shows potential and where farmers can provide suitable sites, not susceptible to erosion.</p>
<p><b>Output 2.1.2.1.3. 2,160 Leader Mothers (LM) trained in gardening practices</b></p>			

Activity 1:establish 60 school gardens, 180 LM vegetable groups and train 2160 LM in gardening practices to establish household model gardens	Greater reliance on IPM solutions for pest problems  Improving training packages and pesticide handling guidelines	Training on pesticide handling guidelines as per submitted PERSUAP was implemented with technical staff in FY2016.	Activity will start in FY2017. Leader Mothers identified during FY2016, but gardening to staff in the first quarter of FY2017
Sub-purpose 2.2: Increased Agricultural sales			
Outcome 2.2.1: Improved Storage Practices			
Output 2.2.1.2.1: 12 agricultural collecting centers constructed			
Activity 1: Construct 12 Agricultural Collection Centers (ACCs)  Constructions planned during FY16Q4	Work will be limited to the area required (no un-used land will be cleared).  Soil erosion and siltation will be minimized using mechanical and biological erosion control techniques.  Vegetative material will be used for composting, for staking, and for heating and cooking material, and stored when necessary away from potable water sources.  Put sign 2 meters wider than the infrastructure site itself to avoid injury of people passing near the construction site.  ESF is required for all storage centers	Selection of suitable site is included in the design, as well as measures to protect surroundings.	ACC construction will begin in Q4 of FY2016
		Soil erosion and siltation considered in the design of the building during and after construction.	
		As users of ACC’s are FFS farmers, they will be involved in composting vegetative material.	
		Necessary identification and security measures included in the design and planning of construction.	
		ESF for 2 constructions submitted for approval for Amoron’i Mania region.	
Sub-purpose 2.3: Increased engagement of women and men in diversified viable micro-enterprises			
Output 2.3.2.0.2: 9,600 of people trained in entrepreneurial skills (financial management, business management)			

<p>Activity 1: Introduce 480 VSLs to IGA opportunities such as:</p> <p>§ Agricultural product processing: peanut oil and peanut paste extraction (for animal and human feeding);</p> <p>§ Soy powder; and rice chalk for animal feeding and composting</p> <p>§ Handcrafts: embroidery, dress making, basket weaving</p>	<p>Train farmers in food safety regulations and rules. Develop technologies which allow a reduction of energy and water use; perform controls for cross-contact from allergens with packaging and in the whole manufacturing process. Cleaning and sanitation products must be verified safe for use.</p> <p>Promote reforestation of needed fibers to compensate overexploitation. Vegetate areas in and around fields with appropriate willow plants</p>	<p>Income Generation Activities value chain study was completed during FY2016 and includes environmental measures to be taken when implemented. IGA activities involving processing are still limited in FY2016, as VSL members chose simpler trading activities.</p> <p>IGA processing activities involving use of vegetal material not implemented during FY2016</p>	<p>Implementation of IGA activities involving processing is being planned for FY2016. Adequate environmental measures will be included in the design as per IGA study done.</p>
Activities	Mitigation Measures	Monitoring indicator Status	Comments
<b>Purpose 3: Improved disaster preparedness and response and natural resource management in vulnerable communities</b>			
<i>Sub-purpose 3.1: Community Disaster Mitigation infrastructure improved</i>			
<b>Outcome 3.1.1: Environmentally sound community Infrastructure developed/maintained</b>			
<p>280 kilometers of roads rehabilitated</p> <p>65 km rehabilitated, 17 km rehabilitation will start during Q4 For FY2016</p>	<p>Work will be limited to the area required (no un-used land will be cleared). Soil erosion and siltation will be minimized using mechanical and biological erosion control techniques</p>	<p>For rural road construction, clearing have been minimized. Erosion control plan is part of environmentally sound design rural road rehabilitation</p>	<p>3 ESFs for road projects approved during FY2016 (one per region)</p> <p>Photos of mitigation measures in annex.</p>

sources.		
<p>The slope of the canal will be constructed using technical norms to reduce erosion risks.</p>		
<p>A schematic plan showing the cross sectional shape and size of each canal will be developed</p>		
<p>Debris will be stored in an appropriate location.</p>	<p>Composting have been promoted and workers are allowed to use debris as compost input</p>	
<p>Workers will be located at a suitable distance from each other, to minimize the production and problems related to dust.</p>	<p>ASOTRY ensure that on-site safety is followed by workers</p>	
<p>Drainage water will be diverted back to natural stream and riverbeds. In case of negative effects (for ecology or health), to reduce these effects, drainage work will be recommended to reduce potential stagnant water</p>	<p>Hydrological study have been done prior any rural road rehabilitation to avoid watercourse disturbance</p>	
<p>Soil erosion and siltation will be minimized using mechanical and biological erosion control following GEMs recommendation</p>	<p>Erosion control plan given with the rural road ESFs have been followed</p>	
<p>Local community will be consulted through DPMP preparation and train on O&amp;M of constructed or rehabilitated roads</p> <p>ESF will give more specific mitigation regarding local problematic</p>	<p>Road User Association have been trained regarding O&amp;M of rehabilitated rural road</p> <p>Infrastructure team have been trained and mitigation measures included inside the ESF have been followed</p>	



<p>- 43 multi-use irrigation system constructed or rehabilitated including improved pond in the South West region</p> <p>4 MUWP constructed, 6 constructions or rehabilitations are planned during Q4 For FY2016</p>	<p>Initial study will consider both surface water and groundwater including a local knowledge of groundwater position using wells</p> <p>Works will be implemented by skilled workers</p> <p>Soil erosion and siltation will be minimized using mechanical and biological erosion control following GEMs recommendation regarding small scale irrigation system</p> <p>Local community will be consulted through DPMP preparation and train on O&amp;M of constructed or rehabilitated irrigation system</p> <p>ESF will give more specific mitigation regarding local problematic</p>	<p>Initial study and Monitoring depend on prepFY2016 submission</p>	<p>Two ESF for multi-use water points approved for the region where these are implemented and 1 ESF approved for irrigation and 2 under preparation for submission in the last quarter of FY2016.</p>
<p>- 64 safe water points constructed or rehabilitated</p>	<p>Meet the environmental standards for solid waste management</p> <p>Communication of key messages to water supply infrastructure manager</p> <p>Keep system clean and running.</p> <p>Extend drainage system/channel</p> <p>Conduct PH, turbidity and bacterial water quality tests at least twice during the project;</p> <p>Monitor monthly after starting at installation, Report quarterly</p>	<p>ESF to be developed in the last quarter of FY2106.</p> <p>Initial technical and environmental assessment will be conducted in FY2016.</p> <p>Training to water Management committees includes training on environmental aspects.</p>	<p>This activity is to be implemented during FY2017, in coordination with organizations that can ensure adequate water testing.</p>
<p>- 720,000 tree seedlings of local species produced</p>	<p>Program strategy will be conducted on native species choice</p>	<p>Tree nurseries have been installed in ASOTRY's office to conduct studies regarding native species growth.</p>	<p>3 ESFs approved for reforestation in</p>



<p>400000 tree seedlings produced (30% of local species) For FY2016</p>	<p>Program strategy will be conducted on native species choice</p>	<p>Tree nurseries have been installed in ASOTRY's office to conduct studies regarding native species growth.</p>	<p>Amoron'i Mania, Haute Matsiatra and Antsimo Andrefana</p>
	<p>Site of reforestation will be chosen following DPMP consultation, depending on infrastructure and Reforestation need and available land</p>	<p>Through DPMP, community has been consulted and chose reforestation site. ASOTRY reforestation strategy defines conditions of site choice.</p>	
	<p>Local community environmental friendly effort will be promoted regarding plastic bags waste storing</p>	<p>Plastic bag have been stored and recycling process is planned for FY2017</p>	
	<p>ESF will give specific mitigation regarding local problematic</p>	<p>Infrastructure team have been trained and mitigation measures included inside the ESF have been followed</p>	
<p>- 400 of men and women trained to establish tree nurseries (2 people per nursery)</p> <p>81 tree nurseries installed, 162 women and men trained For FY2016</p>	<p>Tree nursery site will be chosen regarding risk of erosion</p>	<p>Erosion control plan have been followed.</p>	
	<p>Program strategy will be conducted on native species</p>	<p>Tree nurseries have been installed to conduct studies regarding native species growth.</p>	
	<p>ESF will give specific mitigation regarding local problematic</p>	<p>Infrastructure team have been trained and mitigation measures included inside the ESF have been followed.</p>	

## ii. Status of mitigation and monitoring

The activities under the Health and Nutrition Component, with a Negative Determination and Conditions, are all activities that were planned to continue in FY2017.

For the activities under the Health and Nutrition Component, all of which had a Negative Determination and Conditions, the concerns for wood burning in with Community Complementary Feeding and Learning Sessions (CCFLS) were considered in the re-design to be completed in FY2016, to include the use of fuel efficient stove and reforestation activities were included in community mitigation plans. Monitoring of volume of wood needed for CCFLS activities will be done as required and this information will be used to determine the adequate number of trees to replant. In addition the DPMP plans already identify reforestation zones in all targeted communities for the replanting to be successful and maintained by the community members. This activity will start in FY2017. The construction of latrines, also to start in FY2017, includes measures to prevent soil erosion and decommissioning. And the construction of tippy taps is accompanied by sensitization on how to dispose of used bottles.

For the Agriculture and livelihoods component, the activities that were concerned by the Negative Determination with Conditions include the implementation of agricultural and livestock activities, including gardening, and the construction of Agricultural Collection Centers (ACC). For all training activities, which have been on-going for all FY2016, the techniques promoted include the use of the relevant mitigation measures accompanying the agricultural activities. This includes intercropping, crop rotation, agroforestry, contour farming, minimum tillage, composting, and erosion control techniques. For livestock activities, also ongoing in FY2016, it includes land management selection of adapted breeds, fodder production to reduce pressure on land, composting and ponds sites selection to reduce loss of natural habitats. For construction of agricultural collection center, which if planned to start in the last quarter of FY2016, all necessary environmental measures are include in the design, including site selection, measures to control erosion and to promote security. For Income Generation activities, environmental measures to be taken are included in the value chain study made, although the more intense processing activities are yet to start in FY2017.

In the Resilience Component a number of environmental measures to take and monitor are included in the planning of rehabilitation and construction projects, including roads, irrigation, water points and the reforestation activities. For planned infrastructure, tree nurseries and reforestation, ESFs have been submitted and approved prior any rehabilitation, construction or plantation. Measures include environmentally sound design of all infrastructures, management of debris, composting, soil erosion and siltation controlling measures, training of IMA's in adequate mitigation measures and technical environmental standards for such projects. Road projects and multi-use water points/ponds were constructed/rehabilitated during FY2016, while irrigation projects will only start in the last quarter of the fiscal year. Environmental and Ecological study have been done for each activity to prevent impact on sensitive ecosystems. For rural road and MUWS rehabilitation or construction, Hydrological and hydrogeological study have been conducted to avoid watercourse disturbance For reforestation, implemented in

the second and third quarter of FY2106, it includes the use of local species, selection of reforestation sites involving the community and erosion control.

### **C. Awardee Recommendations for Beyond Compliance and Institutionalization of Environmentally Sound Practices**

As part of the mitigation and monitoring plan, for each infrastructure and reforestation activity, Environmental Officer will conduct Environmental and Ecological Examination as part of ASOTRY environmental strategy.

Environmental and Ecological Examination will allow the infrastructure team to understand environmental and ecological situation prior to any construction or rehabilitation and will help them to follow mitigation plan for each activity.

The Environmental and Ecological Examination of the reforestation site will help the Environmental Officer and Resilience Specialist to implement mitigation plan and help the will help safeguard community assets.

Annex 1:



Training and demonstration on composting application



## Annex 2: Mitigation measures for Infrastructure rehabilitation and construction

### Rural road:

Installation of erosion control device to avoid erosion and siltation near the rehabilitated rural road





## Construction or rehabilitation of rural road drainage system



## Multi-Use Water Point: Construction only for FY16



Constructed MUWS including grading to minimize erosion and siltation near and around the pond.

Clearing have been minimized to avoid disturbance on local flora and erosion around the MUWS



Construction of grading



Installation of erosion control device using local species



### Annex 3: Reforestation

Tree nursery installed near the reforestation site. Materials used during the construction are provided by the community. All wood needed to construct the tree nursery have been counted



added to ASOTRY reforestation target for FY16





When digging hole, minimum disturbance have been respected to avoid soil erosion and siltation downhill

During reforestation process, break fires have been installed and minimum disturbance to avoid later erosion and siltation downhill (photo below)

